```
     FILE 'REGISTRY' ENTERED AT 13:48:36 ON 19 APR 2002
L1             0 S FUSOBACTERIUM VARIUM?
L2             0 S FUSOBACTERIUM (A) VARIUM?
L3             0 S FUSOBACTERIUM (W) VARIUM

     FILE 'CAPLUS' ENTERED AT 13:49:20 ON 19 APR 2002
                E FUSOBACTERIUM VARIUM
L4          1363 S E2 OR E4 OR E5 OR E6 OR E7 OR E8
L5            99 S L4 AND VARIUM
L6             0 S L5 AND (IMMUNOBLOT? OR WESTERN? OR AUTOANTIBOD? OR ANTIBOD? O
L7             0 S L5 AND AUTOIMMUNE?
L8             1 S L5 AND IMMUNE
L9            11 S L5/TI

=> s l5 and immunoassay?
          53600 IMMUNOASSAY?
L10           0 L5 AND IMMUNOASSAY?

=> s l5 and inject?
         596802 INJECT?
L11           1 L5 AND INJECT?
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1988:68553 CAPLUS
DN 108:68553
TI Comparative immunological studies on Corynebacterium parvum polysaccharide and **Fusobacterium varium** lipopolysaccharide
AU Marx, A.; Salageanu, Aurora; Olinescu, A.; Gancevici, G.
CS Cantacuzino Inst., Bucharest, Rom.
SO Arch. Roum. Pathol. Exp. Microbiol. (1987), 46(1), 57-65
CODEN: APEMAR; ISSN: 0004-0037
DT Journal
LA English
AB Comparative immunol. studies were carried out on C. parvum's polysaccharide (CPP) and the lipopolysaccharide (LPS) of F. **varium** , in order to differentiate structurally the 2 antigens of anaerobic bacteria origin. CPP was not toxic in galactosamine-sensitized mice, and therefore it lacks a lipid A moiety. LPS and CPP are mitogenic on mice spleen cells and activate complement, both activities being however distinctly lower in the CPP. The presence of an addnl. structure in the CPP mol. is suggested which, in contrast to the antigenic determinant, is not affected by oxidn. with periodate. In its reaction with Concanavalin A, in contrast to LPS, CPP shown a pptn. curve presenting a sharp peak, which may be inhibited by mannose, glucose, and glucosamine. In ConA soln. as well as in lysozyme soln., C. parvum (CPP+) bacterial suspension does agglutinate, whereas F. **varium** (LPS+) does not. Thes same C. parvum strain was more intensely phagocytized than the F. **varium** strain.
TI Comparative immunological studies on Corynebacterium parvum polysaccharide and **Fusobacterium varium** lipopolysaccharide
AB Comparative immunol. studies were carried out on C. parvum's polysaccharide (CPP) and the lipopolysaccharide (LPS) of F. **varium** , in order to differentiate structurally the 2 antigens of anaerobic bacteria origin. CPP was not toxic in galactosamine-sensitized mice, and therefore it lacks a lipid A moiety. LPS and CPP are mitogenic on mice spleen cells and activate complement, both activities being however distinctly lower in the CPP. The presence of an addnl. structure in the CPP mol. is suggested which, in contrast to the antigenic determinant, is not affected by oxidn. with periodate. In its reaction with Concanavalin A, in contrast to LPS, CPP shown a pptn. curve presenting a sharp peak, which may be inhibited by mannose, glucose, and glucosamine. In ConA soln. as well as in lysozyme soln., C. parvum (CPP+) bacterial suspension does agglutinate, whereas F. **varium** (LPS+) does not. Thes same C. parvum strain was more intensely phagocytized than the F. **varium** strain.
ST Corynebacterium polysaccharide **Fusobacterium** lipopolysaccharide immunol
IT Mitogens
(lipopolysaccharide of **Fusobacterium varium** and polysaccharide of Corynebacterium parvum as)
IT **Fusobacterium varium**
(lipopolysaccharide of, **immune** reactions of)
IT Lipopolysaccharides
RL: RCT (Reactant)
(of **Fusobacterium varium**, toxicity and **immune** reactions of)
IT Toxicity
(of Corynebacterium parvum polysaccharide vs. **Fusobacterium varium** lipopolysaccharide, lipid A in relation to)
IT Polysaccharides, biological studies
RL: RCT (Reactant)

ANSWER 1 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 2001:593619 CAPLUS
DN 135:300313
TI Purification and characterization of .beta.-methylaspartase from **Fusobacterium varium**
AU Bearne, Stephen L.; White, Robert L.; MacDonnell, Jennifer E.; Bahrami, Shervin; Gronlund, Jesper
CS Department of Biochemistry and Molecular Biology, Dalhousie University, Halifax, NS, B3H 4H7, Can.
SO Molecular and Cellular Biochemistry (2001), 221(1&2), 117-126
CODEN: MCBIB8; ISSN: 0300-8177
PB Kluwer Academic Publishers
DT Journal
LA English
AB .beta.-Methylaspartase (EC 4.3.1.2) was purified 20-fold in 35% yield from **Fusobacterium** varium, an obligate anaerobe. The purifn. steps included heat treatment, fractional pptn. with ammonium sulfate and ethanol, gel filtration, and ion exchange chromatog. on DEAE-Sepharose. The enzyme is dimeric, consisting of two identical 46 kDa subunits, and requires Mg2+ (Km = 0.27 .+-. 0.01 mM) and K+ (Km = 3.3 .+-. 0.8 mM) for max. activity. .beta.-Methylaspartase-catalyzed addn. of ammonia to mesaconate yielded two diastereomeric amino acids, identified by HPLC as (2S,3S)-3-methylaspartate (major product) and (2S,3R)-3-methylaspartate (minor product). Optimal activity for the deamination of (2S,3S)-3-methylaspartate (Km = 0.51 .+-. 0.04 mM) was obsd. at pH 9.7. The N-terminal protein sequence (30 residues) of the F. varium enzyme is 83% identical to the corresponding sequence of the clostridial enzyme.
RE.CNT 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
TI Purification and characterization of .beta.-methylaspartase from **Fusobacterium varium**
AB .beta.-Methylaspartase (EC 4.3.1.2) was purified 20-fold in 35% yield from **Fusobacterium** varium, an obligate anaerobe. The purifn. steps included heat treatment, fractional pptn. with ammonium sulfate and ethanol, gel filtration, and ion exchange chromatog. on DEAE-Sepharose. The enzyme is dimeric, consisting of two identical 46 kDa subunits, and requires Mg2+ (Km = 0.27 .+-. 0.01 mM) and K+ (Km = 3.3 .+-. 0.8 mM) for max. activity. .beta.-Methylaspartase-catalyzed addn. of ammonia to mesaconate yielded two diastereomeric amino acids, identified by HPLC as (2S,3S)-3-methylaspartate (major product) and (2S,3R)-3-methylaspartate (minor product). Optimal activity for the deamination of (2S,3S)-3-methylaspartate (Km = 0.51 .+-. 0.04 mM) was obsd. at pH 9.7. The N-terminal protein sequence (30 residues) of the F. varium enzyme is 83% identical to the corresponding sequence of the clostridial enzyme.
ST methylaspartase **Fusobacterium** purifn characterization
IT Protein sequences
(homol., N-terminal; N-terminal sequence of .beta.-methylaspartase from **Fusobacterium** varium exhibits significant homol. with .beta.-methyltransferases from other species)
IT Michaelis constant
(kinetic parameters for .beta.-methylaspartase from **Fusobacterium** varium)
IT Quaternary structure
(protein; .beta.-methylaspartase from **Fusobacterium** varium is homodimer and requires Mg2+ and K+ for max. activity)
IT **Fusobacterium** varium
(purifn. and characterization of .beta.- methylaspartase from **Fusobacterium** varium)
IT 9033-26-5P, .beta.-Methylaspartase
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)
(purifn. and characterization of .beta.- methylaspartase from **Fusobacterium** varium)

IT 7439-95-4, Magnesium, biological studies 7440-09-7, Potassium, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(.beta.-methylaspartase from **Fusobacterium** varium is homodimer and requires Mg2+ and K+ for max. activity)

L9 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 2001:123060 CAPLUS
DN 134:173867
TI Primers and probes for PCR identification of Eubacterium and **Fusobacterium varium**
IN Benno, Yoshimi; Kageyama, Akiko
PA Yakult Biosciens Kenkyu Zaidan, Japan; Institute of Physical and Chemical Research
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001046063	A2	20010220	JP 1999-226176	19990810

AB 16S rRNA gene-targeting oligonucleotides that can be used as primers or probes for speedy identification of Eubacterium species and **Fusobacterium** varium by PCR are provided.
TI Primers and probes for PCR identification of Eubacterium and **Fusobacterium varium**
AB 16S rRNA gene-targeting oligonucleotides that can be used as primers or probes for speedy identification of Eubacterium species and **Fusobacterium** varium by PCR are provided.
ST Eubacterium **Fusobacterium** varium identification PCR primer probe
IT rRNA
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(16 S; primers and probes for PCR identification of Eubacterium and **Fusobacterium** varium)
IT Gene, microbial
RL: ANT (Analyte); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process)
(16S rRNA; primers and probes for PCR identification of Eubacterium and **Fusobacterium** varium)
IT DNA sequences
Eggerthella lenta
Eubacterium
Eubacterium biforme
Eubacterium eligens
Eubacterium limosum
Eubacterium rectale
Eubacterium tortuosum
Fusobacterium varium
PCR (polymerase chain reaction)
(primers and probes for PCR identification of Eubacterium and **Fusobacterium** varium)
IT Primers (nucleic acid)
Probes (nucleic acid)
RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(primers and probes for PCR identification of Eubacterium and **Fusobacterium** varium)
IT 326502-85-6 326502-86-7 326502-87-8 326502-88-9 326502-89-0
326502-90-3 326502-91-4 326502-92-5 326502-93-6 326502-94-7

326502-95-8 326502-96-9 326502-97-0 326502-98-1 326502-99-2
326503-00-8 326503-01-9 326503-02-0 326503-03-1
RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(PCR primer/probe; primers and probes for PCR identification of Eubacterium and **Fusobacterium** varium)

L9 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 2000:296476 CAPLUS
DN 133:73429
TI The human gut bacteria Bacteroides thetaiotaomicron and **Fusobacterium varium** produce putrescine and spermidine in cecum of pectin-fed gnotobiotic rats
AU Noack, Jutta; Dongowski, Gerhard; Hartmann, Ludger; Blaut, Michael
CS Department of Gastrointestinal Microbiology, German Institute of Human Nutrition Potsdam-Rehbrucke, Bergholz-Rehbrucke, 14558, Germany
SO Journal of Nutrition (2000), 130(5), 1225-1231
CODEN: JONUAI; ISSN: 0022-3166
PB American Society for Nutritional Sciences
DT Journal
LA English
AB Pectin is a sol. nondigestible polysaccharide that stimulates cecal polyamine formation in rats. Bacteroides and **fusobacteria**, two numerically dominant bacterial population groups in the large intestine, can synthesize high amts. of spermidine and putrescine in vitro. The effects of pectin on the polyamine prodn. by defined bacterial species in vivo were studied in 18 germ-free male Wistar rats. The treatments included monoassocn. with Bacteroides thetaiotaomicron + fiber-free diet, combined assocn. with B. thetaiotaomicron + **Fusobacterium** varium + fiber-free diet, and combined assocn. with B. thetaiotaomicron + F. varium + fiber-free diet + 10% pectin. The cecal content of the monoassocd. rats fed fiber-free diet contained large amts. (1.51.+-.0.21 .mu.mol/dry cecum content) of spermidine which was the major polyamine. The cecum of diassocd. rats fed the fiber-free diet contained even higher concns. of spermidine (25.3.+-.0.21 .mu.mol/dry cecum content) and also putrescine, which was now the dominant polyamine (0.32.+-.0.28 vs. 3.01.+-.0.28 .mu.mol/dry cecum content in monoassocn. vs. diassocn.). Pectin consumption by diassocd. rats led to addnl. increases in the cecal concns. of all polyamines; putrescine, spermidine and spermine levels were 40, 37, and 100%, resp., higher in the diassocd. rats consuming pectin than in rats fed the pectin-free diet. Since the microbial counts in the cecum did not differ in the diassocd. groups, the elevated concns. of polyamines obsd. in the pectin group must have been due to stimulated bacterial polyamine synthesis. The decline of individual polyamines from cecum to feces detected at the end of the study in all treatment groups and the high microbial counts in the cecum and in feces suggest that bacterial polyamines are absorbed in the cecum and colon. Pectin may stimulate intestinal microbes to synthesize large amts. of polyamines which may be utilized by the host.
RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
TI The human gut bacteria Bacteroides thetaiotaomicron and **Fusobacterium varium** produce putrescine and spermidine in cecum of pectin-fed gnotobiotic rats
AB Pectin is a sol. nondigestible polysaccharide that stimulates cecal polyamine formation in rats. Bacteroides and **fusobacteria**, two numerically dominant bacterial population groups in the large intestine, can synthesize high amts. of spermidine and putrescine in vitro. The effects of pectin on the polyamine prodn. by defined bacterial species in vivo were studied in 18 germ-free male Wistar rats. The treatments included monoassocn. with Bacteroides thetaiotaomicron + fiber-free diet, combined assocn. with B. thetaiotaomicron + **Fusobacterium** varium

+ fiber-free diet, and combined assocn. with B. thetaiotaomicron + F. varium + fiber-free diet + 10% pectin. The cecal content of the monoassocd. rats fed fiber-free diet contained large amts. (1.51.+-.0.21 .mu.mol/dry cecum content) of spermidine which was the major polyamine. The cecum of diassocd. rats fed the fiber-free diet contained even higher concns. of spermidine (25.3.+-.0.21 .mu.mol/dry cecum content) and also putrescine, which was now the dominant polyamine (0.32.+-.0.28 vs. 3.01.+-.0.28 .mu.mol/dry cecum content in monoassocn. vs. diassocn.). Pectin consumption by diassocd. rats led to addnl. increases in the cecal concns. of all polyamines; putrescine, spermidine and spermine levels were 40, 37, and 100%, resp., higher in the diassocd. rats consuming pectin than in rats fed the pectin-free diet. Since the microbial counts in the cecum did not differ in the diassocd. groups, the elevated concns. of polyamines obsd. in the pectin group must have been due to stimulated bacterial polyamine synthesis. The decline of individual polyamines from cecum to feces detected at the end of the study in all treatment groups and the high microbial counts in the cecum and in feces suggest that bacterial polyamines are absorbed in the cecum and colon. Pectin may stimulate intestinal microbes to synthesize large amts. of polyamines which may be utilized by the host.

IT Intestinal content
(cecal; dietary pectin effects on Bacteroides thetaiotaomicron and **Fusobacterium** varium prodn. of putrescine, spermine and spermidine in cecum of gnotobiotic rats)

IT Bacteroides thetaiotaomicron
Fusobacterium varium
Intestinal bacteria
Nutrition, animal
(dietary pectin effects on Bacteroides thetaiotaomicron and **Fusobacterium** varium prodn. of putrescine, spermine and spermidine in cecum of gnotobiotic rats)

IT Amines, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(polyamines, nonpolymeric; dietary pectin effects on Bacteroides thetaiotaomicron and **Fusobacterium** varium prodn. of putrescine, spermine and spermidine in cecum of gnotobiotic rats)

IT Fatty acids, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(short-chain; dietary pectin effects on Bacteroides thetaiotaomicron and **Fusobacterium** varium prodn. of putrescine, spermine and spermidine in cecum of gnotobiotic rats)

IT 64-19-7, Acetic acid, biological studies 71-44-3, Spermine 79-09-4, Propionic acid, biological studies 107-92-6, Butyric acid, biological studies 110-60-1, Putrescine 124-20-9, Spermidine
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(dietary pectin effects on Bacteroides thetaiotaomicron and **Fusobacterium** varium prodn. of putrescine, spermine and spermidine in cecum of gnotobiotic rats)

IT 9000-69-5, Pectin
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
(dietary pectin effects on Bacteroides thetaiotaomicron and **Fusobacterium** varium prodn. of putrescine, spermine and spermidine in cecum of gnotobiotic rats)

L9 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 2000:176176 CAPLUS
DN 132:331953
TI Characteristics of **Fusobacterium** ulcerans, a new and unusual species compared with **Fusobacterium varium** and **Fusobacterium** mortiferum
AU Claros, M. C.; Papke, Y.; Kleinkauf, N.; Adler, D.; Citron, D. M.;

(SDS; **Fusobacterium** ulcerans comparison with **Fusobacterium** varium and **Fusobacterium** mortiferum)

IT Carbohydrates, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(metab.; **Fusobacterium** ulcerans comparison with **Fusobacterium** varium and **Fusobacterium** mortiferum)

L9 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1999:677645 CAPLUS
DN 131:283813
TI Utilization of D-amino acids by **Fusobacterium** nucleatum and **Fusobacterium varium**
AU Ramezani, M.; MacIntosh, S. E.; White, Robert L.
CS Dep. Chemistry, Dalhousie Univ., Halifax, NS, B3H 4J3, Can.
SO Amino Acids (1999), 17(2), 185-193
CODEN: AACIE6; ISSN: 0939-4451
PB Springer-Verlag Wien
DT Journal
LA English
AB The utilization of D and L-amino acids with acidic, basic or polar side-chains was demonstrated by HPLC. Two species of the anaerobe **Fusobacterium** utilized D-lysine and the L isomers of glutamate, glutamine, histidine, lysine, and serine. Only F. varium used L-arginine, D-glutamate, and D-serine as substrates, whereas F. nucleatum specifically utilized D-histidine and D-glutamine. D-Glutamate accumulated in F. nucleatum cultures supplemented with D-glutamine, and ornithine was detected when either DL- or L-arginine was included in F. varium cultures. Based on literature precedents, D-glutamate and D-histidine are isomerized to their L isomers prior to degrdn., but sep. catabolic pathways are possible for each enantiomer of lysine and serine.
RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
TI Utilization of D-amino acids by **Fusobacterium** nucleatum and **Fusobacterium varium**
AB The utilization of D and L-amino acids with acidic, basic or polar side-chains was demonstrated by HPLC. Two species of the anaerobe **Fusobacterium** utilized D-lysine and the L isomers of glutamate, glutamine, histidine, lysine, and serine. Only F. varium used L-arginine, D-glutamate, and D-serine as substrates, whereas F. nucleatum specifically utilized D-histidine and D-glutamine. D-Glutamate accumulated in F. nucleatum cultures supplemented with D-glutamine, and ornithine was detected when either DL- or L-arginine was included in F. varium cultures. Based on literature precedents, D-glutamate and D-histidine are isomerized to their L isomers prior to degrdn., but sep. catabolic pathways are possible for each enantiomer of lysine and serine.
ST D amino acid utilization **Fusobacterium**
IT **Fusobacterium** nucleatum
Fusobacterium varium
(utilization of D-amino acids by **Fusobacterium** nucleatum and **Fusobacterium** varium)
IT Amino acids, biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(D-; utilization of D-amino acids by **Fusobacterium** nucleatum and **Fusobacterium** varium)
IT 56-45-1, L-Serine, biological studies 56-85-9, L-Glutamine, biological studies 56-86-0, L-Glutamic acid, biological studies 56-87-1, L-Lysine, biological studies 71-00-1, L-Histidine, biological studies 312-84-5, D-Serine 351-50-8, D-Histidine 923-27-3, D-Lysine 5959-95-5, D-Glutamine 6893-26-1, D-Glutamic acid
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(utilization of D-amino acids by **Fusobacterium** nucleatum and **Fusobacterium** varium)

L9 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2002 ACS

AN 1997:662984 CAPLUS
DN 127:275168
TI Catabolism of amino acids by **fusobacterium** species (**fusobacterium** nucleatum, **fusobacterium varium**)
AU Ramezani, Mohammad
CS Dalhousie Univ., Halifax, NS, Can.
SO (1996) 179 pp. Avail.: UMI, Order No. DANN15901
From: Diss. Abstr. Int., B 1997, 58(4), 1890
DT Dissertation
LA English
AB Unavailable
TI Catabolism of amino acids by **fusobacterium** species (**fusobacterium** nucleatum, **fusobacterium varium**)
ST amino acid catabolism **fusobacterium**
IT Catabolism
Fusobacterium nucleatum
Fusobacterium varium
(catabolism of amino acids by **fusobacterium** species)
IT Amino acids, biological studies
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
(catabolism of amino acids by **fusobacterium** species)

L9 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1991:3291 CAPLUS
DN 114:3291
TI In vitro susceptibilities of Bacteroides gracilis, **Fusobacterium** mortiferum and F. **varium** to 17 antimicrobial agents
AU Courcol, Rene J.; Lee, Kyung Won; Downes, Julie; Wexler, Hannah M.; Baron, Ellen J.; Finegold, Sydney M.
CS Wadsworth V.A. Med. Cent., Los Angeles, CA, USA
SO J. Antimicrob. Chemother. (1990), 26(1), 157-8
CODEN: JACHDX; ISSN: 0305-7453
DT Journal
LA English
AB A total of 17 antimicrobial agents were tested against 26 clin. isolated of the title anaerobes: B. gracilis 18 strains, F. mortiferum 3 strains, and F. varum 5 strains. Nearly half of the B. gracilis stains were susceptible to penicillin, piperacilin, and clindamycin. The MIC90s of the B-lactams for this species are high, as are those of co-trimoxazole, vancomycin, josamycin, and nalidixic acid. The best activity was shown by chloramphenicol, gentamicin (uniquely) and metronidazole. Josamycin, vancomycin, gentamicin, rifampicin, nalidixic acid and ciprofloxacin were poor in activity against F. mortiferum and F. varium. Most .beta.-lactams were active against these 2 species. The other active drugs chloramphenicol and metronidazole.
TI In vitro susceptibilities of Bacteroides gracilis, **Fusobacterium** mortiferum and F. **varium** to 17 antimicrobial agents
ST antimicrobial sensitivity Bacteroides **Fusobacterium**; antibiotic sensitivity Bacteroides **Fusobacterium**
IT Bacteroides gracilis
Fusobacterium mortiferum
Fusobacterium varium
(antimicrobial susceptibility of)
IT Antibiotics
(Bacteroides gracilis and **Fusobacterium** susceptibility to)
IT 56-75-7, Chloramphenicol 61-33-6, biological studies 389-08-2, Nalidixic acid 443-48-1, Metronidazole 1403-66-3, Gentamicin 1404-90-6, Vancomycin 8064-90-2, Cotrimoxazole 13292-46-1, Rifampicin 16846-24-5, Josamycin 18323-44-9, Clindamycin 35607-66-0, Cefoxitin 61477-96-1, Piperacillin 64221-86-9, Imipenem 68401-81-0, Ceftizoxime 69712-56-7, Cefotetan 72558-82-8 85721-33-1, Ciprofloxacin
RL: BIOL (Biological study)
(Bacteroides gracilis and **Fusobacterium** susceptibility to)

L9 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1988:68553 CAPLUS
DN 108:68553
TI Comparative immunological studies on Corynebacterium parvum polysaccharide and **Fusobacterium varium** lipopolysaccharide
AU Marx, A.; Salageanu, Aurora; Olinescu, A.; Gancevici, G.
CS Cantacuzino Inst., Bucharest, Rom.
SO Arch. Roum. Pathol. Exp. Microbiol. (1987), 46(1), 57-65
CODEN: APEMAR; ISSN: 0004-0037
DT Journal
LA English
AB Comparative immunol. studies were carried out on C. parvum's polysaccharide (CPP) and the lipopolysaccharide (LPS) of F. varium, in order to differentiate structurally the 2 antigens of anaerobic bacteria origin. CPP was not toxic in galactosamine-sensitized mice, and therefore it lacks a lipid A moiety. LPS and CPP are mitogenic on mice spleen cells and activate complement, both activities being however distinctly lower in the CPP. The presence of an addnl. structure in the CPP mol. is suggested which, in contrast to the antigenic determinant, is not affected by oxidn. with periodate. In its reaction with Concanavalin A, in contrast to LPS, CPP shown a pptn. curve presenting a sharp peak, which may be inhibited by mannose, glucose, and glucosamine. In ConA soln. as well as in lysozyme soln., C. parvum (CPP+) bacterial suspension does agglutinate, whereas F. varium (LPS+) does not. Thes same C. parvum strain was more intensely phagocytized than the F. varium strain.
TI Comparative immunological studies on Corynebacterium parvum polysaccharide and **Fusobacterium varium** lipopolysaccharide
ST Corynebacterium polysaccharide **Fusobacterium** lipopolysaccharide immunol
IT Mitogens
(lipopolysaccharide of **Fusobacterium** varium and polysaccharide of Corynebacterium parvum as)
IT **Fusobacterium** varium
(lipopolysaccharide of, immune reactions of)
IT Lipopolysaccharides
RL: RCT (Reactant)
(of **Fusobacterium** varium, toxicity and immune reactions of)
IT Toxicity
(of Corynebacterium parvum polysaccharide vs. **Fusobacterium** varium lipopolysaccharide, lipid A in relation to)

L9 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1987:172748 CAPLUS
DN 106:172748
TI Intergeneric protoplast fusion between **Fusobacterium varium** and Enterococcus faecium for enhancing dehydrodivanillin degradation
AU Chen, Wei; Ohmiya, Kunio; Shimizu, Shoichi
CS Sch. Agric., Nagoya Univ., Nagoya, 464, Japan
SO Appl. Environ. Microbiol. (1987), 53(3), 542-8
CODEN: AEMIDF; ISSN: 0099-2240
DT Journal
LA English
AB Intergeneric protoplast fusion between F. varium and E. faecium was performed under strictly anaerobic conditions to improve dehydrodivanillin (I) degrdn. The fusion frequency obtained obtained from the selective medium was 0.9-1.3 .times. 10-5. The 7 fusants isolated were all gram-neg. anaerobes with rod shapes like that of F. varium and with main phenotypical properties of cocci like those of E. faecium such as esculin and starch hydrolysis, milk clotting, and lactate prodn. Five fusants showed enhanced I degrdn. activities that were 2-4-fold higher than those of parental strains. Genetic relatedness between a fusant (FE7) and the parents was estd. by DNA-DNA Southern blot hybridization with 32P-labeled chromosomal DNA fragments of F. varium and E. faecium as probes. FE7

showed very high cross-hybridization with both probes, indicating a high DNA homol. between the fusant and both parental strains. Almost all the fusants obtained have been stable for .apprx.2 yr. These results suggest that stable intergeneric gene transfer takes place by protoplast fusion.

TI Intergeneric protoplast fusion between **Fusobacterium varium** and Enterococcus faecium for enhancing dehydrodivanillin degradation

ST protoplast fusion Enterobacter **Fusobacterium** dehydrodivanillin degrdn

IT Fusion, biological
(of Enterococcus faecium and **Fusobacterium** varium, for dehydrodivanillin degrdn.)

IT Streptococcus faecium
(protoplast fusion of **Fusobacterium** varium and, for dehydrodivanillin degrdn.)

IT **Fusobacterium** varium
(protoplast fusion of Enterococcus faecium and, for dehydrodivanillin degrdn.)

IT 2092-49-1, Dehydrodivanillin
RL: PRP (Properties)
(degrdn. of, by protoplast fusants of Enterococcus faecium and **Fusobacterium** varium)

IT 98-89-5, Cyclohexanecarboxylic acid 108-93-0, Cyclohexanol, biological studies 121-34-6, Vanillic acid 2134-90-9, Dehydrodivanillic acid 2134-91-0, 5-Carboxyvanillic acid 81115-96-0
RL: FORM (Formation, nonpreparative)
(formation of, from dehydrodivanillin by Enterococcus faecium-**Fusobacterium** varium fusants)

L9 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2002 ACS

AN 1986:622460 CAPLUS

DN 105:222460

TI Protoplast formation and regeneration of dehydrodivanillin-degrading strains of **Fusobacterium varium** and Enterococcus faecium

AU Chen, Wei; Omiya, Kunio; Shimizu, Shoichi

CS Sch. Agric., Nagoya Univ., Nagoya, 464, Japan

SO Appl. Environ. Microbiol. (1986), 52(4), 612-16
CODEN: AEMIDF; ISSN: 0099-2240

DT Journal

LA English

AB Two strains of rumen anaerobes isolated from dehydrodivanillin-degrading cultures were identified as F. varium and E. faecium. These organisms degraded dehydrodivanillin synergistically to 5-carboxymethylvanillin and vanillic acid. Specific conditions for protoplast formation and cell wall regeneration for both bacteria were detd., under strictly anaerobic conditions, to be as follows. The cell wall of each bacterium in yeast ext. medium was loosened by adding penicillin G during early log-phase growth. The cell wall of F. varium was lysed by lysozyme (1 mg/mL) in glycerol (0.2M)-phosphate buffer (0.05M; pH 7.0). The addn. of NaCl (0.08M) with lysozyme was necessary for lysis of E. faecium in this soln. Almost all cells were converted to protoplasts after 2 h of incubation at 37.degree.. Regeneration of both protoplasts was 20-30% on an agar-contg. yeast ext. medium.

TI Protoplast formation and regeneration of dehydrodivanillin-degrading strains of **Fusobacterium varium** and Enterococcus faecium

ST **Fusobacterium** Enterococcus protoplast formation; cell wall regeneration rumen microorganism; dehydrodivanillin degrdn
Fusobacterium Enterococcus

IT **Fusobacterium** varium
Streptococcus faecium
(cell wall regeneration and protoplast formation by, dehydrodivanillin degrdn. in relation to)

IT Protoplast and Spheroplast
(formation of, by Enterococcus faecium and **Fusobacterium** varium)
IT Cell wall
(regeneration of, by Enterococcus faecium and **Fusobacterium** varium, dehydrodivanillin degrdn. in relation to)
IT 121-33-5 121-34-6 498-00-0 2134-90-9 3507-08-2 81115-96-0 95336-88-2
RL: BIOL (Biological study)
(as intermediate in dehydrodivanillin degrdn. by Enterococcus faecium and **Fusobacterium** varium)
IT 2092-49-1
RL: PRP (Properties)
(degrdn. of, by Enterococcus faecium and **Fusobacterium** varium)

L9 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1984:205435 CAPLUS
DN 100:205435
TI Purification and characterization of C-S lyase from **Fusobacterium varium**. A carbon-sulfur enzyme of cysteine conjugates and some sulfur-containing amino acids
AU Tomisawa, Hiroki; Suzuki, Shuji; Ichihara, Shigeyasu; Fukazawa, Hideo; Tateishi, Mitsuru
CS Dep. Biochem., Nippon Roche Res. Cent., Kamakura, Japan
SO J. Biol. Chem. (1984), 259(4), 2588-93
CODEN: JBCHA3; ISSN: 0021-9258
DT Journal
LA English
AB An enzyme responsible for the C-S bond cleavage of various S-aryl, S-aralkyl, and S-alkyl cysteines was purified .apprx.270-fold from F. varium. Incubation of a cysteine conjugate of p-bromobenzene with the enzyme yielded equimolar amts. of p-bromobenzenethiol, pyruvic acid, and NH3, indicating that the C-S bond cleavage proceeds via an .alpha.,.beta.-elimination reaction. The enzyme activity was inhibited either by NH2OH or KCN and stabilized by pyridoxal phosphate, which probably acted as cofactor. The broad substrate spectrum of this enzyme suggested an important role of the intestinal microflora in the in vivo formation of methylthio-contg. metabolites of various xenobiotics.
TI Purification and characterization of C-S lyase from **Fusobacterium varium**. A carbon-sulfur enzyme of cysteine conjugates and some sulfur-containing amino acids
ST cysteine conjugate CS lyase **Fusobacterium**
IT **Fusobacterium** varium
(cysteine conjugate C-S lyase of)
IT 52-90-4, biological studies 56-89-3, biological studies 498-59-9 638-23-3 1115-93-1 1187-84-4 2481-10-9 2629-59-6 3054-01-1 3183-08-2 4134-56-9 5443-40-3 6341-94-2 34317-61-8 68724-10-7 90120-85-7
RL: BIOL (Biological study)
(cysteine conjugate C-S lyase of **Fusobacterium** specificity for)
IT 104-95-0 7133-37-1 19552-10-4
RL: FORM (Formation, nonpreparative)
(formation of, by cysteine conjugate C-S lyase of **Fusobacterium**, mass spectrum in relation to)
IT 90248-74-1P
RL: PREP (Preparation)
(of **Fusobacterium** varium, purifn. and properties of)

=> d his

(FILE 'HOME' ENTERED AT 13:48:28 ON 19 APR 2002)

Hunt-Gerardo, S.; Montag, Th.; Goldstein, E. J. C.; Rodloff, A. C.

CS Institute of Medical Microbiology and Infectious Epidemiology, University Leipzig, Germany

SO Anaerobe (1999), 5(3/4), 137-140
CODEN: ANAEF8; ISSN: 1075-9964
PB Academic Press
DT Journal
LA English

AB **Fusobacterium** ulcerans is a newly described obligately anaerobic Gram-neg., non-spore-forming rod that has been isolated from tropical ulcers. Two morphotypes were described: one resembling **Fusobacterium** varium and the other **Fusobacterium** mortiferum. Because of the weak or neg. fermn. reactions of most **fusobacteria**, the std. carbohydrate tests used for identification of anaerobe organisms are of little use for identification, and other rapid and simple methods are needed. Eight F. ulcerans strains were characterized using conventional biochem. testing. These strains were further analyzed by PCR employing a single non-specific primer AP3 and by SDS-polyacrylamide gel electrophoresis (SDS-PAGE) of whole cell proteins. PCR using a self-designed pair of primers for the amplification of the spacer (intergenic) region between the 16S and 23S rRNA genes, led to the development of genetic markers for species identification. All F. ulcerans clin. isolates appeared very similar to each other in all the test parameters, but were distinctly different from the type strains of the two phenotypically similar species, F. mortiferum and F. varium. High similarity in PCR- and protein-profiles also raise the possibility that all these F. ulcerans strains came from one clone. Significant differences were noted among the strains of F. mortiferum and F. varium.

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

TI Characteristics of **Fusobacterium** ulcerans, a new and unusual species compared with **Fusobacterium varium** and **Fusobacterium** mortiferum

AB **Fusobacterium** ulcerans is a newly described obligately anaerobic Gram-neg., non-spore-forming rod that has been isolated from tropical ulcers. Two morphotypes were described: one resembling **Fusobacterium** varium and the other **Fusobacterium** mortiferum. Because of the weak or neg. fermn. reactions of most **fusobacteria**, the std. carbohydrate tests used for identification of anaerobe organisms are of little use for identification, and other rapid and simple methods are needed. Eight F. ulcerans strains were characterized using conventional biochem. testing. These strains were further analyzed by PCR employing a single non-specific primer AP3 and by SDS-polyacrylamide gel electrophoresis (SDS-PAGE) of whole cell proteins. PCR using a self-designed pair of primers for the amplification of the spacer (intergenic) region between the 16S and 23S rRNA genes, led to the development of genetic markers for species identification. All F. ulcerans clin. isolates appeared very similar to each other in all the test parameters, but were distinctly different from the type strains of the two phenotypically similar species, F. mortiferum and F. varium. High similarity in PCR- and protein-profiles also raise the possibility that all these F. ulcerans strains came from one clone. Significant differences were noted among the strains of F. mortiferum and F. varium.
(c) 1999 Academic Press.

ST **Fusobacterium** new species characterization

IT **Fusobacterium** mortiferum
Fusobacterium ulcerans
Fusobacterium varium
PCR (polymerase chain reaction)
Taxonomy
(**Fusobacterium** ulcerans comparison with **Fusobacterium** varium and **Fusobacterium** mortiferum)

IT Polyacrylamide gel electrophoresis

L5 ANSWER 1 OF 3 USPATFULL
DETD . . . 25586); F. plauti (ATCC No.: 29863); F. prausnitzii (ATCC No.: human: 27766); F. russi (ATCC No.: cat/25583); F. symbiosum; F. **varium** (ATCC Nos.: 8501, 27725);
DETD . . . of anti-DNA autoantibodies as compared with the serum level observed in animals fed a control milk diet. Autoantibodies can be **detected** utilizing any well known technique including, for example, ELISA, RIA or **immunoblotting.**
DETD . . . in the spleen to SRBC (FIGS. 10A-10B). IgM-bearing cells appeared on day 4, at which time IgG-bearing cells were not **detected** in mice given control milk, whereas hyperimmune milk increased the number of IgG-bearing cells to a **detectable** level ($p<0.001$). The numbers of IgM-bearing and IgG-bearing cells on day 7 after immunization with SRBC showed no significant difference. . .

L5 ANSWER 2 OF 3 USPATFULL
DETD . . . uiro (sweet rice jelly), an (bean paste or jam), yokan (sweet bean jelly), jelly, castella (sponge cake), and Japanese candies; **Western**-style cakes such as bunds, biscuits or crackers, cookies, pies (or tarts), pudding, butter cream, cream puffs, sponge cake, doughnuts, chocolate,. . .
DETD **Detector**: A differential refractometer
DETD . . . - -

Fusobacterium necrophrum							
	GAI#5634	-	.+-.	-	-	-	-
Fusobacterium russii							
	GAI#0317	-	.+-.	-	-	-	-
Fusobacterium **varium**							
	GAI#5566	-	.+-.	-	-	-	-
Fusobacterium **varium**							
	R-25	-	.+-.	-	-	-	-
Megamonas hypermegas							
	R-15	-	+++	++	++	++	+	-
Mitsuokella multiacida							
	VI-71	-.	.	.			

L5 ANSWER 3 OF 3 USPATFULL
DETD . . . (Aquapore RP-300, 10 .mu.m), using acetonitrile and trifluoroacetic acid-water (0.1% trifluoroacetic acid in water) as eluting solvents. The antibiotic was **detected** in the column effluents at 254 nm.
DETD . . . also known to produce typical pathological symptoms in the mouse model (J. W. Whalen et al., presented at the Michigan Branch-**Western** Ontario Branch joint meeting, American Society for Cirobiology, 1982) were inhibited at or below 5 .mu.g of the antibiotic per. . .
DETD . . . and treatment of infections caused by this and other related species of Fusobacterium, such as F. nucleatum, F. gonidiaformans, F. **varium** and F. necrogenes. All these bacteria are opportunistic pathogens which are invariably present in abscesses, necrotic lesions, upper respiratory infections,. . .

=>

WEST Search History

DATE: Friday, April 19, 2002

Set Name side by side	Query	Hit Count	Set Name result set
	DB=USPT,PGPB; PLUR=YES; OP=ADJ		
L4	L1 same (antibod$ or polyclonal or antiser$ or immune or immunoglob$ or immunoassay or elisa or autoimmune or autoantibod$ or auto-antibod$ or ige or iga or igg or igm)	1	L4
L3	L1.ti.	0	L3
L2	L1 and (immunoblot$ or western or immunoassay or immuno-assay or elisa or eliza)	4	L2
L1	(fusobacter$ or fuso-bacter$) same varium	40	L1

END OF SEARCH HISTORY

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NEWS 2	Jan 25	BLAST(R) searching in REGISTRY available in STN on the Web
NEWS 3	Jan 29	FSTA has been reloaded and moves to weekly updates
NEWS 4	Feb 01	DKILIT now produced by FIZ Karlsruhe and has a new update frequency
NEWS 5	Feb 19	Access via Tymnet and SprintNet Eliminated Effective 3/31/02
NEWS 6	Mar 08	Gene Names now available in BIOSIS
NEWS 7	Mar 22	TOXLIT no longer available
NEWS 8	Mar 22	TRCTHERMO no longer available
NEWS 9	Mar 28	US Provisional Priorities searched with P in CA/CAplus and USPATFULL
NEWS 10	Mar 28	LIPINSKI/CALC added for property searching in REGISTRY
NEWS 11	Apr 02	PAPERCHEM no longer available on STN. Use PAPERCHEM2 instead.
NEWS 12	Apr 08	"Ask CAS" for self-help around the clock
NEWS 13	Apr 09	BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS 14	Apr 09	ZDB will be removed from STN

NEWS EXPRESS	February 1 CURRENT WINDOWS VERSION IS V6.0d, CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP), AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
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NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

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* * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 13:23:34 ON 19 APR 2002

=> FIL BIOSIS, CABA, CAPLUS, EMBASE, LIFESCI, MEDLINE, SCISEARCH, USPATFUL, JAPIO
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	SINCE FILE ENTRY	TOTAL SESSION
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=> s Fusobacterium
L1       13750 FUSOBACTERIUM

=> s varium
L2         865 VARIUM

=> s detect? and l2
   8 FILES SEARCHED...
L3         107 DETECT? AND L2

=> s (antisera or antiserum) and l3
L4           0 (ANTISERA OR ANTISERUM) AND L3

=> s l3 and (Western or Immunoblot?)
L5           3 L3 AND (WESTERN OR IMMUNOBLOT?)

=> d bib ab l5 1-3

L5   ANSWER 1 OF 3  USPATFULL
AN     2000:53762  USPATFULL
TI     Use of hyperimmune milk to prevent suppression of T-lymphocyte
       production
IN     Beck, Lee R., Lebanon, OH, United States
       Ishida, Atsunori, Honjo, Japan
       Yoshikai, Yasunobu, Higashiku, Japan
       Murosaki, Shinji, Nara, Japan
       Kubo, Chiharu, Hakata-ku, Japan
       Hidaka, Yoshio, Tokyo, Japan
       Nomoto, Kikuo, Higashi-ku, Japan
PA     Stolle Milk Biologics, Inc., Cincinnati, OH, United States (U.S.
       corporation)
PI     US 6056978              20000502
AI     US 1995-419952          19950410 (8)
RLI    Continuation of Ser. No. US 1993-53253, filed on 28 Apr 1993, now
       abandoned which is a continuation of Ser. No. US 1992-899719, filed on
       16 Jun 1992, now abandoned
DT     Utility
FS     Granted
EXNAM  Primary Examiner: Chan, Christina Y.; Assistant Examiner: Lubet, Martha
```

LREP Sterne, Kessler, Goldstein & Fox P.L.L.C.
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 1473
AB The invention relates to the use of hyperimmune milk derived from milk producing animals hyperimmunized with bacterial antigens including intestinal bacteria. The present hyperimmune milk effectively prevents the decline of immunological functions observed in aging or immunocompromised animals and prevents the translocation of indigenous enteric bacteria from the GI tract of immunocompromised or aged animals, thereby preventing indigenous infection. More specifically, the present hyperimmune milk is administered to an animal in an amount sufficient to effectively prevent translocation of indigenous enteric bacteria in, delay the onset of, lower the rate of, or restore the declining immune functions of, aging or otherwise immunocompromised animals.

L5 ANSWER 2 OF 3 USPATFULL
AN 93:48501 USPATFULL
TI Method of improving intestinal floras
IN Okada, Gentaro, Shizuoka, Japan
Nakakuki, Teruo, Mishima, Japan
Kainuma, Seishiro, Shimizu, Japan
Unno, Takehiro, Fuji, Japan
PA Nihon Shokuhin Kako Co., Ltd., Tokyo, Japan (non-U.S. corporation)
PI US 5219842 19930615
AI US 1990-565441 19900809 (7)
PRAI JP 1989-221927 19890829
JP 1990-61935 19900313
DT Utility
FS Granted
EXNAM Primary Examiner: Waddell, Frederick E.; Assistant Examiner: Henley, III, Raymond J.
LREP Frishauf, Holtz, Goodman & Woodward
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN 3 Drawing Figure(s); 3 Drawing Page(s)
LN.CNT 837
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A .beta.-glucooligosaccharide-containing composition comprising at least one material selected from food, drink and medicine, and at least one selected from a glucooligosaccharide comprising at least one .beta.-1,6 bond and a reduced product thereof. A method of improving intestinal floras, comprising administering to a human or animal for ingestion a physiologically effective amount of at least one selected from a glucooligosaccharide comprising at least one .beta.-1,6 bond and a reduced product thereof. The ingestion of the .beta.-glucooligosaccharide and/or the reduced product thereof can bring about promotion of the selective growth of useful bacteria such as Bifidobacteria and lactic acid bacteria, inhibition of the growth of harmful bacteria or putrefactive bacteria, and hence improvement in the intestinal floras.

L5 ANSWER 3 OF 3 USPATFULL
AN 88:47136 USPATFULL
TI Antibiotic: Treponemycin
IN Gurusiddaiah, Sarangamat, Pullman, WA, United States
Singh, Shrikrishna, Pittsburgh, PA, United States
PA Washington State University Research Foundation, Pullman, WA, United States (U.S. corporation)
PI US 4759928 19880726
AI US 1986-824733 19860131 (6)
DT Utility
FS Granted
EXNAM Primary Examiner: Goldberg, Jerome D.

LREP Wells, St. John & Roberts
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN 9 Drawing Figure(s); 7 Drawing Page(s)
LN.CNT 783
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Two strains of Streptomyces were identified as Streptomyces albovinaceous. Both isolates produced an antibiotic when grown in liquid culture medium containing homogenized oats. The antibiotic (Treponemycin) was isolated from the culture broth by solvent extraction and purified. The antibiotic showed inhibitory activity against several species of bacteria, especially Treponema hyodysenteriae, the causative agent of swine dysentery. In view of the oral 50% lethal dose of 400 mg/kg and its low MIC against four strains of T. hyodysenteriae, the antibiotic has value as a swine dysentery therapeutic. The antibiotic lends itself readily to production of a tetrahydro derivative, a primary amine, a dimethyl ester and a hydrochloride esters and salts of these compounds, and hydrates of these compounds and of the esters or salts can also be produced for pharmaceutical usages.

=> d kwic 1-3 15

L5 ANSWER 1 OF 3 USPATFULL
DETD . . . 25586); F. plauti (ATCC No.: 29863); F. prausnitzii (ATCC No.: human: 27766); F. russi (ATCC No.: cat/25583); F. symbiosum; F. **varium** (ATCC Nos.: 8501, 27725);
DETD . . . of anti-DNA autoantibodies as compared with the serum level observed in animals fed a control milk diet. Autoantibodies can be **detected** utilizing any well known technique including, for example, ELISA, RIA or **immunoblotting**.
DETD . . . in the spleen to SRBC (FIGS. 10A-10B). IgM-bearing cells appeared on day 4, at which time IgG-bearing cells were not **detected** in mice given control milk, whereas hyperimmune milk increased the number of IgG-bearing cells to a **detectable** level ($p<0.001$). The numbers of IgM-bearing and IgG-bearing cells on day 7 after immunization with SRBC showed no significant difference. . .

L5 ANSWER 2 OF 3 USPATFULL
DETD . . . uiro (sweet rice jelly), an (bean paste or jam), yokan (sweet bean jelly), jelly, castella (sponge cake), and Japanese candies; **Western**-style cakes such as bunds, biscuits or crackers, cookies, pies (or tarts), pudding, butter cream, cream puffs, sponge cake, doughnuts, chocolate,. . .
DETD **Detector**: A differential refractometer
DETD . . . - -
Fusobacterium necrophrum
GAI#5634
- .+-. - - - - -
Fusobacterium russii
GAI#0317
- .+-. - - - - -
Fusobacterium **varium**
GAI#5566
- .+-. - - - - -
Fusobacterium **varium**
R-25 - .+-. - - - - -
Megamonas hypermegas
R-15 - +++ ++ ++ ++ + -
Mitsuokella multiacida
VI-71 -. . .

L5 ANSWER 3 OF 3 USPATFULL
DETD . . . (Aquapore RP-300, 10 .mu.m), using acetonitrile and trifluoroacetic acid-water (0.1% trifluoroacetic acid in water) as

eluting solvents. The antibiotic was **detected** in the column effluents at 254 nm.

DETD . . . also known to produce typical pathological symptoms in the mouse model (J. W. Whalen et al., presented at the Michigan Branch-**Western** Ontario Branch joint meeting, American Society for Cirobiology, 1982) were inhibited at or below 5 .mu.g of the antibiotic per. . .

DETD . . . and treatment of infections caused by this and other related species of Fusobacterium, such as F. nucleatum, F. gonidiaformans, F. **varium** and F. necrogenes. All these bacteria are opportunistic pathogens which are invariably present in abscesses, necrotic lesions, upper respiratory infections,. . .

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=> d his

     (FILE 'HOME' ENTERED AT 13:23:34 ON 19 APR 2002)

     FILE 'BIOSIS, CABA, CAPLUS, EMBASE, LIFESCI, MEDLINE, SCISEARCH,
     USPATFULL, JAPIO' ENTERED AT 13:23:45 ON 19 APR 2002
L1        13750 S FUSOBACTERIUM
L2          865 S VARIUM
L3          107 S DETECT? AND L2
L4            0 S (ANTISERA OR ANTISERUM) AND L3
L5            3 S L3 AND (WESTERN OR IMMUNOBLOT?)

=> s l1 or l2
L6       14100 L1 OR L2

=> s l6 and (antibod? or polyclonal? or immune? or immunoglob? or immunoassay?)
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     FILE 'BIOSIS, CABA, CAPLUS, EMBASE, LIFESCI, MEDLINE, SCISEARCH,
     USPATFULL, JAPIO' ENTERED AT 13:23:45 ON 19 APR 2002
L1        13750 S FUSOBACTERIUM
L2          865 S VARIUM
L3          107 S DETECT? AND L2
L4            0 S (ANTISERA OR ANTISERUM) AND L3
L5            3 S L3 AND (WESTERN OR IMMUNOBLOT?)
L6        14100 S L1 OR L2

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 NEWS  2  Jan 25  BLAST(R) searching in REGISTRY available in STN on the Web
 NEWS  3  Jan 29  FSTA has been reloaded and moves to weekly updates
 NEWS  4  Feb 01  DKILIT now produced by FIZ Karlsruhe and has a new update
                  frequency
 NEWS  5  Feb 19  Access via Tymnet and SprintNet Eliminated Effective 3/31/02
 NEWS  6  Mar 08  Gene Names now available in BIOSIS
 NEWS  7  Mar 22  TOXLIT no longer available
 NEWS  8  Mar 22  TRCTHERMO no longer available
 NEWS  9  Mar 28  US Provisional Priorities searched with P in CA/CAplus
                  and USPATFULL
 NEWS 10  Mar 28  LIPINSKI/CALC added for property searching in REGISTRY
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               CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
               AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
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STRUCTURE FILE UPDATES: 18 APR 2002 HIGHEST RN 406160-25-6
DICTIONARY FILE UPDATES: 18 APR 2002 HIGHEST RN 406160-25-6

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

```
=> s fusobacterium varium?
            64 FUSOBACTERIUM
             2 VARIUM?
L1           0 FUSOBACTERIUM VARIUM?
                 (FUSOBACTERIUM(W)VARIUM?)

=> s fusobacterium (a) varium?
            64 FUSOBACTERIUM
             2 VARIUM?
L2           0 FUSOBACTERIUM (A) VARIUM?

=> s fusobacterium (w) varium
            64 FUSOBACTERIUM
             2 VARIUM
L3           0 FUSOBACTERIUM (W) VARIUM

=> file caplus
COST IN U.S. DOLLARS                        SINCE FILE      TOTAL
                                              ENTRY    SESSION
FULL ESTIMATED COST                           24.38      24.59

FILE 'CAPLUS' ENTERED AT 13:49:20 ON 19 APR 2002
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FILE COVERS 1907 - 19 Apr 2002 VOL 136 ISS 17
FILE LAST UPDATED: 18 Apr 2002 (20020418/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please
check your SDI profiles to see if they need to be revised. For
information on CAS roles, enter HELP ROLES at an arrow prompt or use
the CAS Roles thesaurus (/RL field) in this file.

```
=> e fusobacterium varium
E1            1     FUSOBACTERIOM/BI
E2         1300     FUSOBACTERIUM/BI
E3            0 --> FUSOBACTERIUM VARIUM/BI
E4            1     FUSOBACTERIUNM/BI
E5            1     FUSOBACTERIUR/BI
E6            2     FUSOBACTERUM/BI
E7            1     FUSOBACTRIUM/BI
E8            2     FUSOBCTERIUM/BI
E9           15     FUSOCELLULAR/BI
E10           1     FUSOCHLORIS/BI
E11           1     FUSOCILLAS/BI
E12           8     FUSOCILLUS/BI

=> s e2 or e4 or e5 or e6 or e7 or e8
           1300 FUSOBACTERIUM/BI
            128 FUSOBACTERIA/BI
           1363 FUSOBACTERIUM/BI
                  ((FUSOBACTERIUM OR FUSOBACTERIA)/BI)
              1 FUSOBACTERIUNM/BI
              1 FUSOBACTERIUR/BI
              2 FUSOBACTERUM/BI
              1 FUSOBACTRIUM/BI
              2 FUSOBCTERIUM/BI
L4         1363 FUSOBACTERIUM/BI OR FUSOBACTERIUNM/BI OR FUSOBACTERIUR/BI OR
                FUSOBACTERUM/BI OR FUSOBACTRIUM/BI OR FUSOBCTERIUM/BI

=> s l4 and varium
            142 VARIUM
L5           99 L4 AND VARIUM

=> s l5 and (immunoblot? or western? or autoantibod? or antibod? or antiser?)
          33669 IMMUNOBLOT?
          86818 WESTERN?
          12266 AUTOANTIBOD?
         345093 ANTIBOD?
          64678 ANTISER?
L6            0 L5 AND (IMMUNOBLOT? OR WESTERN? OR AUTOANTIBOD? OR ANTIBOD? OR
                ANTISER?)

=> s l5 and autoimmune?
          24815 AUTOIMMUNE?
L7            0 L5 AND AUTOIMMUNE?

=> s l5 and immune
         133142 IMMUNE
              6 IMMUNES
         133144 IMMUNE
                  (IMMUNE OR IMMUNES)
L8            1 L5 AND IMMUNE

=> d l8 bib ab kwic 1

L8   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2002 ACS
AN   1988:68553  CAPLUS
DN   108:68553
TI   Comparative immunological studies on Corynebacterium parvum polysaccharide
     and Fusobacterium varium lipopolysaccharide
AU   Marx, A.; Salageanu, Aurora; Olinescu, A.; Gancevici, G.
CS   Cantacuzino Inst., Bucharest, Rom.
```

SO Arch. Roum. Pathol. Exp. Microbiol. (1987), 46(1), 57-65
CODEN: APEMAR; ISSN: 0004-0037
DT Journal
LA English
AB Comparative immunol. studies were carried out on C. parvum's polysaccharide (CPP) and the lipopolysaccharide (LPS) of F. **varium**, in order to differentiate structurally the 2 antigens of anaerobic bacteria origin. CPP was not toxic in galactosamine-sensitized mice, and therefore it lacks a lipid A moiety. LPS and CPP are mitogenic on mice spleen cells and activate complement, both activities being however distinctly lower in the CPP. The presence of an addnl. structure in the CPP mol. is suggested which, in contrast to the antigenic determinant, is not affected by oxidn. with periodate. In its reaction with Concanavalin A, in contrast to LPS, CPP shown a pptn. curve presenting a sharp peak, which may be inhibited by mannose, glucose, and glucosamine. In ConA soln. as well as in lysozyme soln., C. parvum (CPP+) bacterial suspension does agglutinate, whereas F. **varium** (LPS+) does not. Thes same C. parvum strain was more intensely phagocytized than the F. **varium** strain.
TI Comparative immunological studies on Corynebacterium parvum polysaccharide and **Fusobacterium varium** lipopolysaccharide
AB Comparative immunol. studies were carried out on C. parvum's polysaccharide (CPP) and the lipopolysaccharide (LPS) of F. **varium**, in order to differentiate structurally the 2 antigens of anaerobic bacteria origin. CPP was not toxic in galactosamine-sensitized mice, and therefore it lacks a lipid A moiety. LPS and CPP are mitogenic on mice spleen cells and activate complement, both activities being however distinctly lower in the CPP. The presence of an addnl. structure in the CPP mol. is suggested which, in contrast to the antigenic determinant, is not affected by oxidn. with periodate. In its reaction with Concanavalin A, in contrast to LPS, CPP shown a pptn. curve presenting a sharp peak, which may be inhibited by mannose, glucose, and glucosamine. In ConA soln. as well as in lysozyme soln., C. parvum (CPP+) bacterial suspension does agglutinate, whereas F. **varium** (LPS+) does not. Thes same C. parvum strain was more intensely phagocytized than the F. **varium** strain.
ST Corynebacterium polysaccharide **Fusobacterium** lipopolysaccharide immunol
IT Mitogens
(lipopolysaccharide of **Fusobacterium varium** and polysaccharide of Corynebacterium parvum as)
IT **Fusobacterium varium**
(lipopolysaccharide of, **immune** reactions of)
IT Lipopolysaccharides
RL: RCT (Reactant)
(of **Fusobacterium varium**, toxicity and **immune** reactions of)
IT Toxicity
(of Corynebacterium parvum polysaccharide vs. **Fusobacterium varium** lipopolysaccharide, lipid A in relation to)
IT Polysaccharides, biological studies
RL: RCT (Reactant)
(of Corynebacterium parvum, toxicity and **immune** reactions of)
IT Corynebacterium parvum
(polysaccharide of, **immune** reactions of)

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	26.26	50.85

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.62	-0.62

SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 13:51:09 ON 19 APR 2002

L5 ANSWER 1 OF 3 USPATFULL
AN 2000:53762 USPATFULL
TI Use of hyperimmune milk to prevent suppression of T-lymphocyte production
IN Beck, Lee R., Lebanon, OH, United States
Ishida, Atsunori, Honjo, Japan
Yoshikai, Yasunobu, Higashiku, Japan
Murosaki, Shinji, Nara, Japan
Kubo, Chiharu, Hakata-ku, Japan
Hidaka, Yoshio, Tokyo, Japan
Nomoto, Kikuo, Higashi-ku, Japan
PA Stolle Milk Biologics, Inc., Cincinnati, OH, United States (U.S. corporation)
PI US 6056978 20000502
AI US 1995-419952 19950410 (8)
RLI Continuation of Ser. No. US 1993-53253, filed on 28 Apr 1993, now abandoned which is a continuation of Ser. No. US 1992-899719, filed on 16 Jun 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Chan, Christina Y.; Assistant Examiner: Lubet, Martha
LREP Sterne, Kessler, Goldstein & Fox P.L.L.C.
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN 10 Drawing Figure(s); 9 Drawing Page(s)
LN.CNT 1473
AB The invention relates to the use of hyperimmune milk derived from milk producing animals hyperimmunized with bacterial antigens including intestinal bacteria. The present hyperimmune milk effectively prevents the decline of immunological functions observed in aging or immunocompromised animals and prevents the translocation of indigenous enteric bacteria from the GI tract of immunocompromised or aged animals, thereby preventing indigenous infection. More specifically, the present hyperimmune milk is administered to an animal in an amount sufficient to effectively prevent translocation of indigenous enteric bacteria in, delay the onset of, lower the rate of, or restore the declining immune functions of, aging or otherwise immunocompromised animals.

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 (FILE 'HOME' ENTERED AT 13:23:34 ON 19 APR 2002)

     FILE 'BIOSIS, CABA, CAPLUS, EMBASE, LIFESCI, MEDLINE, SCISEARCH,
     USPATFULL, JAPIO' ENTERED AT 13:23:45 ON 19 APR 2002
L1         13750 S FUSOBACTERIUM
L2           865 S VARIUM
L3           107 S DETECT? AND L2
L4             0 S (ANTISERA OR ANTISERUM) AND L3
L5             3 S L3 AND (WESTERN OR IMMUNOBLOT?)
L6         14100 S L1 OR L2

=>
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